Amendments to the Specification

Please replace the paragraph of page 1, lines 19-29 and page 2 lines 1-3 with the following amended paragraph:

As photolithography tool manufacturers transition to wavelengths at or below 157 nanometers, contamination control becomes more important. Manufacturers are currently optimizing purge-flow systems and material chemistry to prevent lens contamination caused by the condensation of gasses that form as a result of photoresist exposure to laser light. Deposition from photoresist outgassing can change the optical behavior of the lens in the tool. When this happens, an additional layer forms that is not homogenous over the lens surface which causes the focus to change. This lack of focus will detune the lens and the quality of the image. The atmospheric purification provided at 248 and 193 nm by ozone generated from ambient oxygen is expected to lessen significantly at 157 nm because air is not transparent to the vacuum ultraviolet light. At 157 nm the chamber must be purged of oxygen [[be]] by being displaced with nitrogen. Presently, purging systems such as radial symmetry purge and cross-field purge alone may not meet the stringent needs of 157 nm and it appears that photolithography tools will need to incorporate contamination control (filtration, diffusion, and purification) methods for tool optimization.

Please replace the paragraph, page 2 lines 9-16, with the following amended paragraph:

However, the prior art fails to appreciate or disclose the arduous performance specifications that porous membrane must provide in order to be effective in an apparatus that uses a purged pellicle to reticle gap in a lithography system. It further fails to disclose porous membranes that meet such specifications. Such a membrane must have a low coefficient of thermal expansion due to the fluctuations in temperature that ~~occurs~~ occur during the process. Stresses caused by minor differences in thermal expansion can result in warpage of the frame, such warpage resulting in a shifting of the pellicle, which would direct the light in the wrong location, leading to defects.

Please replace the first paragraph of page 8, lines 1-8 with the following amended paragraph:

Referring to FIG. 3, the frame 60 in one embodiment of this invention is cut out from flat sheet 62 formed by sintering dendritic INVAR powder. Cutting is effected with a diamond wheel

or CO laser along lines 64, 66, 68 and 70 to produce nonporous surfaces. Cutting is effected with EDM under the following conditions to produce gas porous surfaces 72, 74, 76 and 78 which have pores sufficiently small to filter particles having a size of 0.003 microns or larger. Thus, gas flow can be effected from surface 78 through surface 72 or vise versa while gas flow is prevented through surface 66 and 64 thereby permitting gas purging within the air gap formed by cutting surfaces [[60]] 74, 68, 76 and 70.

Please replace the second paragraph of page 8, lines 9-15 with the following amended paragraph:

Referring to FIG. 4, the frame 80 is formed from four legs 82, 84, 86 and 88 joined by four elbow joints 90, 92, 94 and 96. The four legs can be cut from a flat sheet in the same manner described above with reference to FIG. 3 so that surfaces 98, 100, 102 and 104 are nonporous to gas while surfaces 106, 108, 110 and 112 are porous to gas so that a frame is formed having the same selective permeability to gas as the frame described above with reference to FIG. 3. The legs and elbow joints form flat surfaces so that a pellicle and reticle can be bonded to the frame 80 in parallel position to each other.

Please replace the abstract with the following amended abstract:

~~The present invention provides a~~ A gas porous media~~, the bulk matrix of~~ which comprises a material having a low coefficient of thermal expansion that is [[also]] capable of retaining 99.99% or more of particles of a size of about 0.003 microns and larger at 0.2 slpm/cm^2 while demonstrating a permeability of 3.5×10^{-12} m^2 and a porosity of around 62% is disclosed. The porous media~~, preferably a membrane, is also fabricated into in such a way that the resultant assembly, in this case a frame,~~ can be fabricated into a frame that is capable of retaining 99.9999999% of particles greater than 0.003 μm in diameter at 8.3 sccm/cm^2 with a permeability of 3.0×10^{-13} m^2 and a porosity of around 53%. ~~Both porous medias~~ The porous media can be tailored by changing the raw materials and process to yield media with a range of porosities and that exhibit permeability between 1.0E^{-13} and 1.0E^{-11} m^2. The ~~present invention further provides the application of this~~ porous media are used in frames for supporting a pellicle and a reticle~~,~~ ~~such frames positioned~~ in a parallel relationship to each other. The frames may comprise porous media in its entirety or the porous media can be fabricated and sealed into a solid support frame. ~~It is possible to fabricate membrane in a variety of different porosities and desired properties.~~